

PATENT

REMARKS

The Office Action dated January 12, 2006 has been received and considered. Claim 13 has been cancelled without prejudice. Reconsideration of the outstanding rejections in the present application is respectfully requested based on the following remarks.

Rejection of Claim 13

At page 3 of the Office Action, claim 13 was rejected to as failing to comply with the written description requirements. Claim 13 has been cancelled without prejudice. Accordingly, withdrawal of the rejection to claim 13 is respectfully requested.

Rejection of Claims 1-2, 4-8, 19, and 21-23

At page 3 of the Office Action, claims 1-2, 4-8, 19, and 21-23 are rejected under 35 U.S.C. § 102(b) as being anticipated by Jang (U.S. 5,481,487). This rejection is respectfully traversed.

With respect to claim 1, the claim presently recites "when in a first mode of operation, accessing table data in a table in a first manner to perform a first transform of the first data; and when in a second mode of operation, accessing table data in the table in a second manner to perform a second transform of the first data, wherein the second transform is an inverse transform relative to the first transform." These elements are not disclosed or suggested by Jang.

The Office Action asserts that these elements are illustrated as block 140 in FIG. 4 of Jang. However, block 140 merely illustrates a one-dimensional "DCT/IDCT circuit." (Jang, col. 9, lines 27-30). According to Jang, "FIG. 4 shows a 2-D DCT/IDCT architecture 100 according to the present invention. As shown, the 2-D DCT/IDCT architecture 100 *has a 1-D DCT or IDCT circuit 110 as before which outputs intermediate matrices Y in row-column y.sub.0, y₁, y₂, . . . , y₆₃ (in the case of a DCT circuit 110) or shuffled row-column order y₀, y₇, y₁, y₆, y₂, y₆, . . . , y₆₀ (in the case of an IDCT circuit 110).*" Jang, col. 9, lines 6-12 (emphasis added). Jang further states "[t]he transpose memory 120 outputs the matrices y^t in shuffled column row order to the DCT circuit 140 (or column row order *in the case of an IDCT circuit 140*)." *Id.*, col. 9, lines 16-18 (emphasis added). Thus, Jang teaches that block 140 is *either* a DCT circuit (for certain

PATENT

implementations) or an IDCT circuit (for other implementations) and fails to disclose or suggest that the circuit represented by block 140 can operate as both a DCT circuit and an IDCT circuit. Further, there is no disclosure in Jang that the same circuit illustrated by block 140 may operate in different modes of operation to perform different transforms on input data or that Jang accesses table data in different manners. Instead, Jang discloses two different circuits using a single figure, with each circuit operating in only a single mode. Therefore, Jang fails to disclose or suggest each and every element of claim 1.

Claims 2 and 4-8 depend from claim 1. Accordingly, Jang fails to disclose each and every element of these claims, at least by virtue of their dependency on claim 1. Further, claims 2 and 4-8 recite additional non-obvious features.

With respect to claim 19, the claim recites "a table access component to: access said table in a first manner to perform a first transform, access said table in a second manner to perform a second transform, wherein the second transform is an inverse transform relative to the first transform." As explained above, Jang does not disclose or suggest a table access component that can perform two different transforms in different manners. Accordingly, Jang necessarily fails to disclose a table access component that can perform two different transforms in different manners, where one transform is the inverse of the other transform. Therefore, Jang fails to disclose or suggest each and every element of claim 19.

Claims 21-23 depend from claim 19. Accordingly, Jang fails to disclose each and every element of these claims, at least by virtue of their dependency on claim 19. Further, claims 21-23 recite additional non-obvious features.

In view of the forgoing, it is respectfully submitted that the obviousness rejection of claims 1-2, 4-8, 19 and 21-23 is improper. Withdrawal of this rejection and reconsideration of the claims therefore is respectfully requested.

Rejection of Claims 9, 12-16, and 24-27

At page 4 of the Office Action, claims 9, 12-16, and 24-27 are rejected under 35 U.S.C. § 102(e) as being anticipated by Chen (U.S. 6,618,442). This rejection is respectfully traversed.

PATENT

Claim 9 recites "when in a first mode of operation, accessing one of the first table or the second table in a first manner to perform a first transform; and when in a second mode of operation, accessing one of the first table or the second table in a second manner to perform a second transform, wherein the second transform is an inverse transform relative to the first transform." Chen does not disclose these features. Chen discloses, at FIG. 4, a method for applying a transform to a video signal. In one mode of operation, the Chen system performs an 8x8 IDCT transform, and in a second mode the Chen system performs a 2-4x8 IDCT operation. Chen states

A test is made to determine the DCT mode used to encode the video signals at step 410. There are two types of IDCT processes, namely the 8 X 8 IDCT and 2-4 X 8 IDCT. If 8 X 8 DCT encoding was utilized in creating the DV encoded signal, the 8 X 8 IDCT is performed at step 412. If the 2-4 X 8 DCT encoding was utilized, however, the 2-4 X 8 IDCT process is performed at step 414. Both modes yield an 8 X 8 block of pixel values.

Chen, col. 4, line 66 – col. 5, line 6. Accordingly, Chen does not disclose a system or method that performs a first transform in one mode of operation and a second transform in a second mode of operation wherein the second transform is an inverse transform relative to the first transform. Instead, Chen discloses a system that performs two kinds of IDCT transforms, based on the DCT transform used to encode a video signal. The two IDCT transforms are not inverse transforms relative to each other. Accordingly, Chen fails to disclose each and every element of claim 9.

Claims 12 and 14-16 depend from claim 9. Accordingly, Chen fails to disclose each and every element of these claims, at least by virtue of their dependency on claim 9. Further, claims 12 and 14-16 recite additional elements not disclosed by Chen.

Claim 24 recites a system to "when in a first mode of operation, access one of the first table or the second table in a first manner to perform a first transform; and when in a second mode of operation, access one of the first table or the second table in a second manner to perform a second transform, wherein the second transform is an inverse transform relative to the first transform." As explained above, Chen does not disclose a system or method that performs a first transform in one mode of operation and a second transform in a second mode of operation wherein the second transform is an inverse transform relative to the first transform.

PATENT

Claims 25-27 depend from claim 24. Accordingly, Chen fails to disclose each and every element of these claims, at least by virtue of their dependency on claim 24. Further, claims 25-27 recite additional elements not disclosed by Chen.

In view of the forgoing, it is respectfully submitted that the obviousness rejection of claims 9, 10, 12-16 and 24-27 is improper. Withdrawal of this rejection and reconsideration of the claims therefore is respectfully requested.

Rejection of Claims 3, 11, and 20

At page 6 of the Office Action, claims 3, 11, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jang and Chen. This rejection is respectfully traversed.

Claim 3 depends from claim 1. As explained above, Jang fails to disclose or suggest each and every element of claim 1, and Chen does not disclose or suggest those elements lacking in Jang. Accordingly, Jang and Chen, in combination and individually, fail to disclose or suggest each and every element of claim 3, at least by virtue of its dependence on claim 1.

Claim 20 depends from claim 19. As explained above, Jang fails to disclose or suggest each and every element of claim 19, and Chen does not disclose or suggest those elements lacking in Jang. Accordingly, Jang and Chen, in combination and individually, fail to disclose or suggest each and every element of claim 20 at least by virtue of its dependence on claim 19.

Claim 11 depends from claim 9. As explained above, Chen fails to disclose or suggest each and every element of claim 9, and Jang does not disclose or suggest those elements lacking in Jang. Accordingly, Jang and Chen, in combination and individually, fail to disclose or suggest each and every element of claim 11, at least by virtue of its dependence on claim 9.

In view of the forgoing, it is respectfully submitted that the obviousness rejection of claims 3, 11 and 20 is improper. Withdrawal of this rejection and reconsideration of the claims therefore is respectfully requested.

PATENT

Conclusion

The Applicants respectfully submit that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

The Commissioner is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account Number 01-0365.

Respectfully submitted,



Adam D. Sheehan, Reg. No. 42,146
Larson Newman Abel Polansky & White, LLP
5914 West Courtyard Drive, Suite 200
Austin, Texas 78730
(512) 327-5515 (phone)
(512) 327-5452 (fax)

3/7/06
Date